



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/828,935
Source: OIPF
Date Processed by STIC: 9-9-04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT

MARK SPENCER, TELEPHONE: 703-308-4212; FAX: 703-308-4221

Effective 12/13/03: TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER
VERSION 4.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkr41note.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to (EFFECTIVE 12/01/03):
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 10/08/03

Raw Sequence Listing Error Summary

**Does Not Comply
Corrected Diskette Needed**

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 10/828,935

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics
 Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line **not exceed** 72 characters in length. This includes white spaces.
- 3 Misaligned Amino
 Numbering The numbering under each 5th amino acid is misaligned. Do **not** use tab codes between numbers; use **space characters**, instead.
- 4 Non-ASCII The submitted file was **not** saved in ASCII(DOS) text, as **required** by the Sequence Rules. Please **ensure your subsequent submission is saved in ASCII text**.
- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. **Per Sequence Rules, each n or Xaa can only represent a single residue.** Please present the **maximum** number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0
 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.**
- 7 Skipped Sequences
 (OLD RULES) Sequence(s) missing. If intentional, please insert the following lines for **each** skipped sequence:
 (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
 (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 This sequence is intentionally skipped

 Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to **include** the skipped sequences.
- 8 Skipped Sequences
 (NEW RULES) Sequence(s) missing. If **intentional**, please insert the following lines for **each** skipped sequence.
 <210> sequence id number
 <400> sequence id number
 000
- 9 Use of n's or Xaa's
 (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
 Per 1.823 of Sequence Rules, use of <220>-<223> is **MANDATORY** if n's or Xaa's are present.
 In <220> to <223> section, please explain location of **n** or **Xaa**, and which residue **n** or **Xaa** represents.
- 10 Invalid <213>
 Response Per 1.823 of Sequence Rules, the only **valid** <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is **required** when <213> response is Unknown or is Artificial Sequence
- 11 Use of <220> Sequence(s) 3 missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is **MANDATORY** if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
 (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0
 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n/Xaa "**n**" can **only** represent a single nucleotide; "**Xaa**" can **only** represent a single amino acid

**Does Not Comply
Corrected Diskette Needed**



IFWO

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/828,935

DATE: 09/09/2004

TIME: 08:04:43

Input Set : N:\efs\10828935\UTMB1024_txt.txt

Output Set: N:\CRF4\09092004\J828935.raw

3 <110> APPLICANT: Board of Regents, The University of Texas System
 4 Gorenstein, David G.
 5 Luxon, Bruce A.
 6 Herzog, Norbert
 7 Tang, Xian B.
 9 <120> TITLE OF INVENTION: BEAD BOUND COMBINATORIAL OLIGONUCLEOSIDE PHOSPHOROTHIOATE

AND

10 PHOSPHORODITHIOATE APTAMER LIBRARIES
 12 <130> FILE REFERENCE: UTMB:1024
 14 <140> CURRENT APPLICATION NUMBER: 10/828935
 15 <141> CURRENT FILING DATE: 2004-04-21
 17 <150> PRIOR APPLICATION NUMBER: 60/334,887
 18 <151> PRIOR FILING DATE: 2001-11-15
 20 <150> PRIOR APPLICATION NUMBER: 10/272,509
 21 <151> PRIOR FILING DATE: 2002-10-16
 23 <160> NUMBER OF SEQ ID NOS: 70
 25 <170> SOFTWARE: PatentIn version 3.3
 27 <210> SEQ ID NO: 1
 28 <211> LENGTH: 15
 29 <212> TYPE: DNA
 30 <213> ORGANISM: Artificial
 32 <220> FEATURE:
 33 <223> OTHER INFORMATION: Synthetic oligonucleotide.
 36 <220> FEATURE:
 37 <221> NAME/KEY: misc_feature
 38 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic oligonucleotide
 40 <400> SEQUENCE: 1
 41 ggatccggtg gtctg 15
 44 <210> SEQ ID NO: 2
 45 <211> LENGTH: 15
 46 <212> TYPE: DNA
 47 <213> ORGANISM: Artificial
 49 <220> FEATURE:
 50 <223> OTHER INFORMATION: Synthetic oligonucleotide.
 53 <220> FEATURE:
 54 <221> NAME/KEY: misc_feature
 55 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic oligonucleotide
 57 <400> SEQUENCE: 2
 58 cctactcgcg aattc 15
 61 <210> SEQ ID NO: 3
 62 <211> LENGTH: 23
 63 <212> TYPE: DNA
 64 <213> ORGANISM: artificial
 66 <220> FEATURE:

See Item # 11 on Error Summary
Sheet.

RAW SEQUENCE LISTING

DATE: 09/09/2004

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TIME: 08:04:43

Input Set : N:\efs\10828935\UTMB1024_txt.txt

Output Set: N:\CRF4\09092004\J828935.raw

```

or
67 <223> OTHER INFORMATION: wherein at least one nucleotide is an achiral thiophosphate
68     dithiophosphate
71 <220> FEATURE:
72 <221> NAME/KEY: modified_base
73 <222> LOCATION: (1)..(23)
74 <223> OTHER INFORMATION: wherein at least one nucleotide is an achiral thiophosphate
or
75     dithiophosphate at positions 1, 3, 5, 7, 9, 11, 13, 15, 17, 19,
76     21, 23.
78 <400> SEQUENCE: 3
79 cagttgaggg gactttccca ggc                                     23
82 <210> SEQ ID NO: 4
83 <211> LENGTH: 23
84 <212> TYPE: DNA
85 <213> ORGANISM: Artificial
87 <220> FEATURE:
88 <223> OTHER INFORMATION: Synthetic oligonucleotide.
91 <220> FEATURE:
92 <221> NAME/KEY: modified_base
93 <222> LOCATION: (1)..(23)
94 <223> OTHER INFORMATION: wherein at least one nucleotide is an achiral thiophosphate
or
95     dithiophosphate at positions 1, 3, 5, 7, 9, 11, 13, 15, 17, 19,
96     21, 23.
98 <400> SEQUENCE: 4
99 cctgcacatc tcaggatgac ttt                                     23
102 <210> SEQ ID NO: 5
103 <211> LENGTH: 22
104 <212> TYPE: DNA
105 <213> ORGANISM: Artificial
107 <220> FEATURE:
108 <223> OTHER INFORMATION: Synthetic oligonucleotide.
111 <220> FEATURE:
112 <221> NAME/KEY: modified_base
113 <222> LOCATION: (1)..(22)
114 <223> OTHER INFORMATION: wherein at least one nucleotide is an achiral thiophosphate
or
115     dithiophosphate at positions 4, 8, 9, 16, 19.
117 <400> SEQUENCE: 5
118 atgtagccag ctagtctgtc ag                                     22
121 <210> SEQ ID NO: 6
122 <211> LENGTH: 22
123 <212> TYPE: DNA
124 <213> ORGANISM: Artificial
126 <220> FEATURE:
127 <223> OTHER INFORMATION: Synthetic oligonucleotide.
130 <220> FEATURE:
131 <221> NAME/KEY: modified_base
132 <222> LOCATION: (1)..(22)
133 <223> OTHER INFORMATION: wherein at least one nucleotide is an achiral thiophosphate
or
134     dithiophosphate at positions 5, 9, 10, 16, 19.

```

136 <400> SEQUENCE: 6

RAW SEQUENCE LISTING

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TIME: 08:04:43

Input Set : N:\efs\10828935\UTMB1024_txt.txt

Output Set: N:\CRF4\09092004\J828935.raw

```

137 cgcccagtga aggtggaacc cc 22
140 <210> SEQ ID NO: 7
141 <211> LENGTH: 50
142 <212> TYPE: DNA
143 <213> ORGANISM: Artificial
145 <220> FEATURE:
146 <223> OTHER INFORMATION: Synthetic oligonucleotide.
149 <220> FEATURE:
150 <221> NAME/KEY: misc_feature
151 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
oligonucleotide
153 <400> SEQUENCE: 7
154 atgcctactc gcgaattccc aggagattcc acggatccgg tggctctgttc 50
157 <210> SEQ ID NO: 8
158 <211> LENGTH: 52
159 <212> TYPE: DNA
160 <213> ORGANISM: Artificial
162 <220> FEATURE:
163 <223> OTHER INFORMATION: Synthetic oligonucleotide.
166 <220> FEATURE:
167 <221> NAME/KEY: misc_feature
168 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
oligonucleotide
170 <400> SEQUENCE: 8
171 cctactcgcg aattcagttg aggggacttt cccaggcgga tccggtggtc tg 52
174 <210> SEQ ID NO: 9
175 <211> LENGTH: 18
176 <212> TYPE: DNA
177 <213> ORGANISM: Artificial
179 <220> FEATURE:
180 <223> OTHER INFORMATION: Synthetic oligonucleotide.
183 <220> FEATURE:
184 <221> NAME/KEY: misc_feature
185 <223> OTHER INFORMATION: Description of Artificial Sequence: consensus sequence
187 <400> SEQUENCE: 9
188 atgcctactc gcgaattc 18
191 <210> SEQ ID NO: 10
192 <211> LENGTH: 18
193 <212> TYPE: DNA
194 <213> ORGANISM: Artificial
196 <220> FEATURE:
197 <223> OTHER INFORMATION: Synthetic oligonucleotide.
200 <220> FEATURE:
201 <221> NAME/KEY: misc_feature
202 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
oligonucleotide
204 <400> SEQUENCE: 10
205 gaacagacca ccgatcc 18
208 <210> SEQ ID NO: 11
209 <211> LENGTH: 22
210 <212> TYPE: DNA
211 <213> ORGANISM: Artificial

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Output Set: N:\CRF4\09092004\J828935.raw

```

213 <220> FEATURE:
214 <223> OTHER INFORMATION: Synthetic oligonucleotide.
217 <220> FEATURE:
218 <221> NAME/KEY: misc_feature
219 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
ligonucleotide
221 <400> SEQUENCE: 11
222 ctgtgagtcg actgatgacg gt 22
225 <210> SEQ ID NO: 12
226 <211> LENGTH: 22
227 <212> TYPE: DNA
228 <213> ORGANISM: Artificial
230 <220> FEATURE:
231 <223> OTHER INFORMATION: Synthetic oligonucleotide.
234 <220> FEATURE:
235 <221> NAME/KEY: misc_feature
236 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
ligonucleotide
238 <400> SEQUENCE: 12
239 agttgagtcg aaggacccat tt 22
242 <210> SEQ ID NO: 13
243 <211> LENGTH: 22
244 <212> TYPE: DNA
245 <213> ORGANISM: Artificial
247 <220> FEATURE:
248 <223> OTHER INFORMATION: Synthetic oligonucleotide.
251 <220> FEATURE:
252 <221> NAME/KEY: misc_feature
253 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
ligonucleotide
255 <400> SEQUENCE: 13
256 cgtcaagtct cagttcccat tt 22
259 <210> SEQ ID NO: 14
260 <211> LENGTH: 22
261 <212> TYPE: DNA
262 <213> ORGANISM: Artificial
264 <220> FEATURE:
265 <223> OTHER INFORMATION: Synthetic oligonucleotide.
268 <220> FEATURE:
269 <221> NAME/KEY: misc_feature
270 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
ligonucleotide
272 <400> SEQUENCE: 14
273 agtcaagtcg aagttccacg gt 22
276 <210> SEQ ID NO: 15
277 <211> LENGTH: 22
278 <212> TYPE: DNA
279 <213> ORGANISM: Artificial
281 <220> FEATURE:
282 <223> OTHER INFORMATION: Synthetic oligonucleotide.
285 <220> FEATURE:
286 <221> NAME/KEY: modified_base
287 <222> LOCATION: (1)..(22)

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Input Set : N:\efs\10828935\UTMB1024_txt.txt

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```

288 <223> OTHER INFORMATION: wherein at least one nucleotide is an achiral thiophosphate
289      dithiophosphate at positions 2, 8, 14, 16, 22.
291 <400> SEQUENCE: 15
292 ctgtgagtcg actgatgacg gt                                22
295 <210> SEQ ID NO: 16
296 <211> LENGTH: 22
297 <212> TYPE: DNA
298 <213> ORGANISM: Artificial
300 <220> FEATURE:
301 <223> OTHER INFORMATION: Synthetic oligonucleotide.
304 <220> FEATURE:
305 <221> NAME/KEY: modified_base
306 <222> LOCATION: (1)..(22)
307 <223> OTHER INFORMATION: wherein at least one nucleotide is an achiral thiophosphate
308      dithiophosphate at positions 8, 12, 14, 20, 22.
310 <400> SEQUENCE: 16
311 agttgagtcg aaggacccat tt                                22
314 <210> SEQ ID NO: 17
315 <211> LENGTH: 22
316 <212> TYPE: DNA
317 <213> ORGANISM: Artificial
319 <220> FEATURE:
320 <223> OTHER INFORMATION: Synthetic oligonucleotide.
323 <220> FEATURE:
324 <221> NAME/KEY: modified_base
325 <222> LOCATION: (1)..(22)
326 <223> OTHER INFORMATION: wherein at least one nucleotide is an achiral thiophosphate
327      dithiophosphate at positions 4, 8, 10, 12, 20, 22.
329 <400> SEQUENCE: 17
330 cgtcaagtct cagttcccat tt                                22
333 <210> SEQ ID NO: 18
334 <211> LENGTH: 22
335 <212> TYPE: DNA
336 <213> ORGANISM: Artificial
338 <220> FEATURE:
339 <223> OTHER INFORMATION: Synthetic oligonucleotide.
342 <220> FEATURE:
343 <221> NAME/KEY: modified_base
344 <222> LOCATION: (1)..(22)
345 <223> OTHER INFORMATION: wherein at least one nucleotide is an achiral thiophosphate
346      dithiophosphate at positions 4, 8, 12, 18, 22.
348 <400> SEQUENCE: 18
349 agtcaagtcg aagttccacg gt                                22
352 <210> SEQ ID NO: 19
353 <211> LENGTH: 22
354 <212> TYPE: DNA
355 <213> ORGANISM: Artificial
357 <220> FEATURE:
358 <223> OTHER INFORMATION: Artificial oligonucleotide.

```


RAW SEQUENCE LISTING ERROR SUMMARY
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Input Set : N:\efs\10828935\UTMB1024_txt.txt
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Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27

Seq#:28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51

Seq#:52,53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70

VERIFICATION SUMMARY

DATE: 09/09/2004

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TIME: 08:04:44

Input Set : N:\efs\10828935\UTMB1024_txt.txt

Output Set: N:\CRF4\09092004\J828935.raw